

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-10700010-2012**
Application Received: **June 22, 2011**
Plant Identification Number: **107-00010**
Permittee: **SABIC Innovative Plastics US LLC**
Mailing Address: P.O.Box 68, Washington, WV 26181

Physical Location:	Washington, Wood County, West Virginia
UTM Coordinates:	441.6 km Easting • 4,345.2 km Northing • Zone 17
Directions:	South of Washington, WV on State Route 892, Wood County

Facility Description

Thermoplastics Manufacturing Site. This is a three-stage manufacturing facility producing elastomers and thermoplastic resins used in automotive, electronic, and pipe industries among others.

The facility SIC Code: 2821; NAICS Code: 325211.

Part 1 of 5 Title V permit was renewed on October 21, 2010.

Part 2 to 5 of 5 was issued on December 22, 2006. When permittee submitted application to renew Part 2 to 5 of 5, the permittee requested to combine Part 1 of 5 and Part 2 to 5 of 5 in one permit. (Note: there are only two existing permits for this facility – Part 1 of 5 and Part 2 to 5 of 5).

For the purpose of the Title V permitting process the facility is divided into 8 major areas:

Latex Processing Area:

The Latex Area produces water-based substrates for the manufacture of thermoplastic resins. The latex can be an intermediate or a final product.

Resins Processing Area:

The Resins Area processes latex substrates into thermoplastic resin. The resin can be an intermediate or a final product. This area also includes equipment for product handling, packaging and loading for shipment.

WS/WV Finishing Lines:

These process lines use Resin Area products to produce plastic pellets.

Support Areas:

These areas include the Quality Control Lab and the Pilot Plant for testing and development in support of the manufacturing areas.

Tank Farm Area:

Process raw materials are stored in bulk storage vessels.

Boiler House:

The boiler house consists of three steam generating boilers and auxiliary equipment. The steam is used for process operations and building heating. Two boilers are permitted to burn either natural gas or fuel oil, and one is permitted to burn only natural gas.

Stationary Reciprocating Internal Combustion Engines:

These engines provide emergency power for firefighting capability and communications in the event of a power outage.

Wastewater Treatment Plant:

The Plant's sanitary sewage stream is treated in a package sanitary treatment plant. The effluent from the package sanitary treatment plant is combined with the Plant's process wastewater and treated in an industrial wastewater treatment plant.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2009 Actual Emissions
Carbon Monoxide (CO)	163.8	31.52
Nitrogen Oxides (NO _x)	444.0	77.02
Particulate Matter (PM ₁₀)	119.2	N/A
Total Particulate Matter (TSP)	119.2	6.80
Sulfur Dioxide (SO ₂)	52.9	11.19
Volatile Organic Compounds (VOC)	738.6	96.06
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2009 Actual Emissions
Acrylonitrile	73.7	8.42
1,3-Butadiene	28.1	2.30
Styrene	407.8	50.16
Cumene	27.1	5.83
Xylenes	3.0	4.46
Ethylbenzene	3.0	0.50
Methyl methacrylate	44.3	3.82
Total HAPs	587	75.49

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 163.8 TPY of Carbon Monoxide, 444 TPY of Nitrogen Oxides, 119.2 TPY of PM₁₀, 738.6 TPY of Volatile Organic Compounds, 407.8 TPY of Styrene, 28.1 TPY of 1,3-Butadiene, 73.7 TPY of Acrylonitrile, 44.3 TPY of Methyl methacrylate, 27.1 TPY of Cumene and 587 tons of total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, SABIC Innovative Plastics US LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR2	Indirect Heat Exchangers
45CSR6	Open burning prohibited
45CSR7	Manufacturing Process Operations
45CSR10	Emission of Sulfur Oxides
45CSR11	Standby plans for emergency episodes
45CSR13	Construction Permit
45CSR16	Standards of Performance for New Stationary Sources
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR21	VOC Emissions
45CSR29	Submission of Emission Statements for VOC & NO _x
45CSR30	Operating permit requirement
45CSR34	Hazardous Air Pollutants
40 C.F.R. 60 Subpart A	General Provisions
40 C.F.R. 60 Subpart Db	Industrial, Commercial and Institutional steam generating units
40 C.F.R. 61 Subpart A	General Provisions
40 C.F.R. 61 Subpart M	Asbestos inspection and removal
40 C.F.R. 61, Subpart FF	Benzene Waste Operations NESHAP
40 C.F.R. 63 Subpart A	General Provisions
40 C.F.R. 63 Subpart F	Maintenance wastewater requirements
40 C.F.R. 63 Subpart G	Storage vessel and Process water provisions
40 C.F.R. 63 Subpart H	Leak Detection and Repair
40 C.F.R. 63 Subpart JJJ	National Emission Standards for Hazardous Air Pollutant Emissions: Group IV
	Polymers and Resins
40 C.F.R. 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)
40 C.F.R. 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Boilers and Process heaters
40 C.F.R. 64	Compliance Assurance Monitoring
40 C.F.R. 68	Risk Management Plan
40 C.F.R. 82, Subpart F	Ozone depleting substances

State Only:	45CSR4	No objectionable odors.
	45CSR21	VOC (Sections 37, 40)
	45CSR22	Air Quality Management Fee Program
	45CSR27	Toxic Air Pollutants
	45CSR31	Confidential Information
	45CSR32	Serious and Minor Violations

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0009B	April 5, 2010	N/A
R13-2486A	March 15, 2005	N/A
R13-1886F	July 28, 2011	N/A
R13-2084C	February 18, 2009	N/A
R13-2572B	March 31, 2010	N/A
R13-2678A	July 28, 2011	N/A
R13-2288C	September 14, 2006	N/A
R13-1588D	April 4, 2012	N/A
R13-1351A	February 22, 2002	N/A
R13-1133A	March 7, 2002	N/A
R13-1097	May 9, 1989	N/A
R13-1069	December 30, 1988	N/A
R13-1009A	October 9, 2003	N/A
R13-0992B	October 14, 2003	N/A
R13-0658B	July 28, 2011	N/A
R13-0301A	March 7, 2002	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

Changes to the existing permit:

1. Changes to Emission Units Table in Section 1.1 of existing permit (Note: Emission Units tables of Part 1 of 5 and Part 2 to 5 of 5 are combined):
 - a. The LDAR is addressed in the permit, as per company's request LDAR equipment entries are removed.
 - b. "Styrene" was added to 009-0R to specify the type of loading station.
 - c. "Fixed Roof" was added to Acrylonitrile storage tanks 009-25078 and 09-25075 to correctly identify the control device.
 - d. In Latex Process area, some equipment IDs were changed because of the following reasons explained by the permittee:

Historically, different air regulatory programs and site practices utilized different source IDs. In order to provide the clearest data for the permit and the site, it is SABIC's intent to use site equipment ID numbers to identify equipment in the Title V permit.

Because these site equipment ID numbers were not consistently used in R13 permits, many of them have been added and corrected through the Title V development process. During the development of the first Title V, some incorrect IDs were included in list of emission units. In other cases, there were no IDs. This permit provides corrected information.

- i. Latex Area BD Wash Tanks (was 30A-08275; now 30B-08305 and 30B-08306). Incorrect ID number in the earlier Title V. Also corrected the description to indicate that these are BD tanks, not Latex Tanks.
- ii. Flare Knockout tank drain (had no ID; now 30B-08405, which is the Flare Knockout tank ID number). Since drains do not have equipment ID numbers, the previous Title V listed no number. With this renewal, SABIC has provided the ID number of the Flare Knockout tank, although the emission point ("EP") LX7 is for the drain from this tank.
- iii. ER Knockout ("KO") Tank Drains (was 30A-08046; now 30A-08046 and 30B-08388). There are actually two ER KO tanks, and the two equipment ID numbers are assigned to them. SABIC added the equipment ID for the ER Tank in Latex B, although the EP LX6 is for the drains from these tanks.
- iv. Latex Blend Tanks and Screeners (was 30A-08055, 30A28020; now "various"). There are multiple screeners and tanks in this emission unit that are all vented to, and controlled by, the Latex Area CTO, which is Emission Point LX14.
- v. Latex Blend Tank #38 (was 30A-25069; now 30B-25109). The ID number was incorrect in the earlier Title V.
- vi. Latex coag pits (was 30B-29275, 30B-28136; now "None"). The numbers in the earlier Title V permit are incorrect. These pits do not have equipment ID numbers. The EP ID for the pits is LX8.
- vii. Latex Activator Mix Tank and Charge Tank (was 30A-08267; now 30A-08267, 30A-08088). Added the ID for an activator tank. There are no applicable requirements for these emission units.
- viii. Latex Area BD Recovery Decant Tank (was 30B-08048; now 30B-08445). The ID number in the original Title V list was incorrect. Also corrected the description to indicate that this is a BD recovery tank, not a latex recovery tank.

- ix. Resin Coag pits (00P-01 or SP1) has been eliminated.
 - x. In Resin Process Area – the I.D. for Resin Building A Reactor-Coagulation- Vacuum System I.D. has been changed from 10A-12021 to “Various”.
 - e. For Resin A, C, E, G & J Transfers – Equipment ID’s used in Section 1.0 Emission Units table are for Weigh silos (aka: Scale Tanks) although site emission factors include multiple resin transfers between silos.
 - f. Emission Unit ID 10J-08011, PBA Reactor Solution tanks do not have a control device. There was an error in the existing Title V permit that the emissions from PBA Reactor solution Tanks went to the control device Resin J catalytic Incinerator.
 - g. PBA Latex storage Tanks emissions are vented to Resin A catalytic incinerator. There was a mistake in existing Title V permit that the tank emissions were vented to Resin J catalytic Incinerator.
 - h. In converting lab section WV Extruder Line and WS Extruder Line were repeated as entries – duplicate entries are deleted. Old emission Unit ID’s 1512069 and 1529010 are WV and WS extruder lines. Old permit had mistakes according to permittee – Emission Unit ID WS-E1 should be 00O-02, WS-E3 should be 00O-02, WV-E1, WV-E2, WV-E3 should be 00O-01. WS-E1, WS-E3, WV-E1,2 & 3 are emission point ID’s.
 - i. Finishing areas A, B, C & D areas, Color Lab, Soap Pilot Plant and Resin Coag Pits are closed.
 - j. A new section “Stationary Internal Combustion Engines” has been added to the table to list all the engines because 40 C.F.R. 63 Subpart ZZZZ (detailed below) is applicable to these emergency engines.
 - k. In “Bulk Resin and Pellet Transfer Systems” section - Rail Road car Loading (E-3), Silo # 56 (MD-28), Railcar Unloading (MD-31), Truck Loading Lines (MC-8, MA-33, MB-13 & MB-14) have been eliminated.
 - l. Description of Boiler # 5 is changed to be consistent with other boiler description as per company’s request.
 - m. Emission Unit ID C-5 in the existing permit was a mistake; the correct ID according to the permittee is 10C-12040.
2. In section 1.2 the following permits were not included in the table because they are inactive – R13-2094, R13-1635, R13-1565, R13-1290, R13-1251C, R13-11118, R13-1052, R13-1029A, R13-841.
3. Boilerplate changes: The following changes have been made due to boilerplate changes:
- a. Section 2.1.4 has been changed to reflect boilerplate change.
 - b. Section 2.20.1 has been changed to reflect boilerplate change.
 - c. Section 3.1.1 has been changed to reflect new 45CSR§6-3.1 language.
 - d. Section 3.1.2 has been changed to reflect new 45CSR§6-3.2 language.
 - e. Section 3.1.3 regarding asbestos and the citation of the section have been changed due to change in boilerplate.
 - f. Paragraph d has been added to section 3.3.1 to reflect boilerplate change requiring reporting of stack test results.
 - g. Sections 3.5.3 and 3.5.5 are changed to include electronic report submittal to EPA.
 - h. Section 3.2.2 has been revised to clarify the calculation of hourly emission rates.

- i. In the facility-wide section of the Title V permit (Section 3) there were five terms that are specific to Subpart JJJ requirements. Since these requirements do not apply to the utilities sections, labs, and finished product management, SABIC proposed to remove these terms from the facility-wide section; 3.1.11, 3.2.3, 3.4.6 and 3.5.9. The appropriate requirements are located in each section of the proposed permit where they apply:

Section 4 (Tank Farm) = 4.1.5, 4.1.6, 4.2.1, 4.3.2, 4.4.2, 4.5.2.

Section 5 (Boilers) = Not Applicable.

Section 6 (WWTP) = Not Applicable.

Section 7 (Latex Area) = 7.1.1, 7.1.7, 7.1.8, 7.1.9, 7.2.5, 7.3.2, 7.4.3, 7.5.1.

Section 8 (Resins Area) = 8.1.19, 8.1.20, 8.1.21, 8.1.22, 8.1.23, 8.2.1, 8.2.2, 8.4.8, 8.5.1.

Section 9 (TechCenter Extruders) = Not Applicable.

Section 10 (Pilot Plant and QC Lab) = Not Applicable.

Section 11 (Bulk Solids Transfer) = Not Applicable.

Section 12 (45CSR21) = Not Applicable.

Section 13 (45CSR27) = Not Applicable.

Section 14 (Engines) = Not Applicable.

- j. Section 3.2.1 is revised to require monthly visible emission checks to be recorded for all equipment with VE limits except equipment that is integral to the process.

Changes/clarifications to the existing permit besides boilerplate changes:

4. Sections 6.1.1, 6.1.2, 6.1.3, 6.1.6, 6.2.1, 6.4.1, 6.4.2, 6.4.5 & 6.5.1 from R30-10700010-2010 (Part 1 of 5) applicable to engine EG-1 have been moved to new Section 14.0. Sections 4, 5 & 6 of Part 1 of 5 remain Sections 4, 5 & 6; Sections 4 & 5 of Parts 2-5 of 5 are now sections 7 & 8. Sections 6 & 7 of Parts 2-5 of 5 were removed due to shut down; Section 8 of Parts 2-5 of 5 is now Section 9.
5. In Sections 7.1.5 and 7.1.6 –The original terms referenced “Section 4.0/5.0 of this permit.” This was not a correct Title V permit reference, but came from R13-2678. Sections 7.1.3, 7.1.4, 7.1.5, and 7.1.6 are the Title V terms from R13-2288C, so they are the correct references for this term.
6. The testing requirement for Latex CTO (former condition 4.3.1 of Part 2-5 of 5) is deleted because the Latex CTO was stack tested on September 19, 2007. The minimum temperature established was 755 degrees F.
7. In section 8.1.18, CGR was not included because Resin Coag Pits (CGR) are eliminated.
8. Section 5.1.19 of Parts 2-5 of 5 is now revised to sections 8.1.19 and 8.1.20. This revised language reflects what SABIC reported in the Subpart JJJ semiannual report submitted in July 2011. The aggregate batch vent in section 8.1.19.b is being vented to the control device and is managed as a Group 1 continuous vent stream, even when the continuous portion of the process is not in use. At present SABIC has no plans to take advantage of the less stringent standard allowed for batch process vents in 40 C.F.R. §63.1321. If the site chooses to pursue this option in the future, SABIC shall submit modification requests for the alternative monitoring plan and the Title V permit. As a result of the above change, Sections 5.1.20 to 5.1.22 are now sections 8.1.21 to 8.1.23.
9. Section 9.0 of the existing permit for Parts 2-5 of 5 has requirements for Color Lab and QC (Quality Control) Lab. Color Lab has been physically removed. The QC Lab requirements are now moved to new Section 10.0 with the Pilot Plant requirements.
10. The Soap Pilot Plant has been physically removed; hence Soap Pilot Plant requirements in Section 10.0 are deleted.
11. Changes to Section 11.0 [Bulk Solids (Resin/Pellet) Transfer]
 - a. Silo # 56 and Railcar Unloading emission sources (Emission Points MD-28 and MD-31) have been deleted because they have been physically removed from the facility and associated R13-1029A has been placed in inactive status.

- b. Mixer, Weigh Hopper, Rail Car , Compounder, Feed Hopper & Weigh Hopper emission sources (Emission Points E-3, E-4 & E-5) have been deleted because they have been physically removed from the facility and associated R13-0658A has been modified to R13-0658B to remove those sources.
 - c. Truck Loading Lines (Emission Points MC-8, 33, 13 & 14) have been deleted because they have been physically removed from the facility and associated R13-1565 has been placed in inactive status.
12. Section 14.0 – A new section is added for 40 C.F.R. 63 Subpart ZZZZ requirements for 4 engines at the facility.
- a. 3 engines [WWTP Emergency Generator EG1, Diesel Fire Pump1 (00H-01) and Diesel Fire Pump 2 (00H-02)] are CI existing stationary engines ≤ 500 HP Located at Major Source of HAP, constructed before June 12, 2006. Following are the 40 C.F.R. 63 Subpart ZZZZ requirements for these engines:
Compliance date is May 3, 2013.

Emission Limitations: 40 C.F.R. §63.6602, Table 2c

Operating Limitations: No Requirements

Fuel Requirements: No Requirements

Performance Tests: No Requirements

Monitoring, Installation, Collection, Operation and Maintenance Requirements: 40 C.F.R. §63.6625(e), (f), (h), (i).

Initial Compliance: No Requirements
Continuous Compliance: 40 C.F.R. §§63.6605, 63.6640

Notification Requirements: No Requirements

Recordkeeping Requirements: 40 C.F.R. §63.6655, except §63.6655 (c)

Reporting Requirements: Footnote 1 of Table 2c

General Provisions (40 CFR part 63) - Table 8: Yes, except per 40 C.F.R. §63.6645(a)(5), the following do not apply: §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
 - b. Engine (Gatehouse Generator) (00H-03) is a SI existing stationary engine ≤ 500 HP Located at Major Source of HAP, constructed before June 12, 2006.

Compliance date is October 19, 2013.
Emission Limitations: 40 C.F.R. §63.6602, Table 2c

Operating Limitations: No Requirements

Fuel Requirements: No Requirements

Performance Tests: No Requirements

Monitoring, Installation, Collection, Operation and Maintenance Requirements: 40 C.F.R. §63.6625(e), (f), (h), (j)

Initial Compliance: No Requirements

Continuous Compliance: 40 C.F.R. §§63.6605, 63.6640

Notification Requirements: No Requirements

Recordkeeping Requirements: 40 C.F.R. §63.6655, except 63.6655 (c)

Reporting Requirements: Footnote 1 of Table 2c

General Provisions (40 CFR part 63) - Table 8: Yes, except per 40 C.F.R. §63.6645(a) (5), the following do not apply: 40 C.F.R. §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).

- c. Sample recordkeeping form specified in R13-2486, B.2 is not included in this permit.

13. 40 CFR Part 64 – *Compliance Assurance Monitoring (CAM)*

- a. Dust Collectors listed in Appendix 3 and in Section 1.1 of the permit classified as “Integral”.

SABIC’s product is a plastic resin that is in a fine solid (powder) form. The manufacture of this material requires moving it, in its solid form, from the dryers through various storage areas and then to packaging processes or loading for transportation off-site. The resin is generally transferred from location to location pneumatically using either blowers or vacuum systems that entrain the resin in an air stream and then move the air and product to the desired location. Most of the product drops out of the air stream by gravity and design. Only a small percentage of the resin product entrained in the airflow reaches the dust collectors. The dust collectors in the transfer systems capture the air-entrained product, and allow the air to exit the process for the pneumatic movement. The entrained product, or dust, that does reach the dust collector or fabric filter, is returned directly to the process or product stream when it falls or is shaken from the collectors. Thus, these dust collectors are not pollution control equipment, but are “integral to the process”. That is, they are designed to keep the product in the proper location and in condition to offer it for sale; they are not designed to control particulate matter emissions to the atmosphere. Hence, according to the definition of control device in 40 C.F.R. §64.1, the units using these “integral” dust collectors are not subject to CAM because they do not have a control device.

- b. Dust Collectors listed in Appendix 3 and classified as “Pollution Control”:

Control Device	Is the unit subject to an emission limitation or standard other than one exempt under 40 C.F.R. §64.2(b)(1)? If yes, state pollutant(s).	Is the control device used to achieve compliance with such emission limitation or standard? If yes, state pollutant(s) controlled.*	Does the unit have potential pre-control device emission of the applicable regulated air pollutant that are equal to or greater than the amount for a source to be classified as a major source?	Subject to CAM?
30A-26002	Yes, PM (45CSR7)	No	Not Applicable	No
10E-26016	Yes, PM (45CSR7)	No	Not Applicable	No
10E-26017	Yes, PM (45CSR7)	No	Not Applicable	No
10C-26019	Yes, PM (45CSR7)	No	Not Applicable	No
10J-26012	Yes, PM (45CSR7)	No	Not Applicable	No
015-26010	Yes, PM (45CSR7)	No	Not Applicable	No
015-26011	Yes, PM (45CSR7)	No	Not Applicable	No
015-26014	Yes, PM (45CSR7)	No	Not Applicable	No
015-26015	Yes, PM (45CSR7)	No	Not Applicable	No
015-11005	Yes, PM (45CSR7)	No	Not Applicable	No
015-12086	Yes, PM (45CSR7)	No	Not Applicable	No
015-26021	Yes, PM (45CSR7)	No	Not Applicable	No
012-26012	Yes, PM (45CSR7)	No	Not Applicable	No

012-26017	Yes, PM (45CSR7)	No	Not Applicable	No
012-26026	Yes, PM (45CSR7)	No	Not Applicable	No
012-26040	Yes, PM (45CSR7)	No	Not Applicable	No

*According to permittee control device is not required to meet 45CSR7 limit for sources using the control devices above.

- c. Catalytic Thermal oxidizer (CTO) (30B-12130) has 45CSR13 limits for NO_x, CO, SO₂, PM₁₀, VOC, Acrylonitrile & 1,3-Butadiene in Title V condition 7.1.3. The emissions of HAPs (Acrylonitrile & 1,3-Butadiene) from CTO are not subject to 40 CFR Part 64 because they are subject to 40 CFR Part 63, Subpart JJJ. Being subject to Subpart JJJ meets the exemption criterion at 40 CFR §64.2(b)(1)(i) for the affected HAPs. Therefore, all of the HAPs with limits in Title V condition 7.1.3, which are emitted from CTO, are not subject to 40 CFR Part 64.

CTO is not a control device for NO_x, SO₂, CO and PM₁₀ and potential emissions for these pollutants are much less than 100 tons. Hence, according to 40 CFR §64.2(a), NO_x, CO, SO₂ and PM₁₀ emissions with limits in Title V condition 7.1.3, which are emitted from CTO, are not subject to 40 CFR Part 64.

The emissions of VOC from CTO is not subject to 40 CFR Part 64 because the existing Title V permit specifies a continuous compliance determination method for the CTO (according to 40 CFR Part 63, Subpart JJJ requirement) and hence meets the exemption criterion at 40 CFR §64.2(b)(1)(vi) for VOC.

- d. Resin A Catalytic Incinerator (10A-12021) has 45CSR13 limits for NO_x, CO, SO₂, PM, VOC, Acrylonitrile, Methyl Methacrylate & Styrene in Title V condition 8.1.13. The emissions of HAPs (Acrylonitrile Methyl Methacrylate & Styrene) from the Catalytic Incinerator are not subject to 40 CFR Part 64 because they are subject to 40 CFR Part 63, Subpart JJJ. Being subject to Subpart JJJ meets the exemption criterion at 40 CFR §64.2(b)(1)(i) for the affected HAPs. Therefore, all of the HAPs with limits in Title V condition 8.1.13, which are emitted from Catalytic Incinerator, are not subject to 40 CFR Part 64.

Catalytic Incinerator is not a control device for NO_x, SO₂, CO and PM and potential emissions for these pollutants are much less than 100 tons. Hence, according to 40 CFR §64.2(a), NO_x, CO, SO₂ and PM emissions with limits in Title V condition 8.1.13, which are emitted from Catalytic Incinerator, are not subject to 40 CFR Part 64.

The emissions of VOC from Catalytic Incinerator is not subject to 40 CFR Part 64 because the existing Title V permit specifies a continuous compliance determination method for the Catalytic Incinerator (according to 40 CFR Part 63, Subpart JJJ requirement) and hence meets the exemption criterion at 40 CFR §64.2(b)(1)(vi) for VOC.

CAM exemption for 10A-12021 is explained above; exemptions for other control devices in the following table are similar to 10A-12021.

Control Device	Title V permit limit for	The unit is not a control device for	Is the unit subject to an emission limitation or standard other than one exempt under 40 C.F.R. §64.2(b)(1)? If yes, state pollutant(s).	Subject to CAM?
10A-12021	NO _x , CO, SO ₂ , PM, VOC, Acrylonitrile, Methyl Methacrylate & Styrene.	NO _x , CO, SO ₂ & PM	No	No
10C-01002	NO _x , VOC, Acrylonitrile, Methyl Methacrylate & Styrene.	NO _x	No	No

10E-01002	NO _x , CO, SO ₂ , PM, VOC, Acrylonitrile.	NO _x , CO, SO ₂ & PM	No	No
10G-01001	NO _x , VOC & Acrylonitrile	NO _x	No	No
10J-01001	NO _x , CO, SO ₂ , PM, VOC, Acrylonitrile & Styrene	NO _x , CO, SO ₂ & PM	No	No

- e. Caustic Scrubber/Carbon Canister system (09-12010) – Condition 8.1.1 of the permit specifies allowable VOC limits of 0.7 tons/yr from caustic scrubber (09-12010). Uncontrolled PTE for VOC before caustic scrubber is 17.52 tpy which is much less than 100 tpy. Hence, according to 40 CFR §64.2(a), VOC emissions with limits in Title V condition 8.1.1, which are emitted from caustic scrubber, are not subject to 40 CFR Part 64.

- f. Resin C dryer:

The carbon bed for the Resin C dryer is not designed or operated as pollution control equipment; it is inherent to the process. The dryer is a fluidized bed unit that operates in a nitrogen atmosphere. Heated nitrogen is passed through the water-wet resin to remove the water and to significantly reduce the residual NAV (non-aqueous volatiles) in the product to meet customer specifications. A portion of the nitrogen stream is recirculated in order to reduce the cost the nitrogen supply. The process recirculates approximately 26,000 cfm of nitrogen, saving at least 5 million dollars per year in nitrogen cost. Recirculation is accomplished by passing the nitrogen through a carbon bed, which removes unreacted organics from the nitrogen stream. Without the process of recirculating the nitrogen through the carbon bed, it would not be cost effective to make the product. The carbon bed does not contact the product, but is used to purify nitrogen for reuse. Because of this design, the carbon bed has a side effect of reducing acrylonitrile to the atmosphere, but that is not the purpose of the carbon bed design. Therefore, according to the definition of “Inherent process equipment” in 40 CFR64, this carbon bed is not a control device and according to 40 CFR §64.2(a) CAM is not applicable.

- g. “The Latex Area Flare (30B-01002; LX1) is used to control HAPs, 1,3-Butadiene and VOC emissions from the emission source ‘Latex Building A and Building B Process Equipment and Recovery System’. This emission source is subject to the requirements of 40 C.F.R. 63, Subpart JJJ for HAP emissions; and the Latex Flare, which is used to demonstrate compliance with these emission limitations, is subject to the control device requirements under 40 C.F.R. 63, Subpart JJJ. Also, the Latex Flare had a continuous compliance determination method specified in the initial Title V permit. Being subject to Subpart JJJ meets the exemption criterion at 40 CFR §64.2(b)(1)(i) for the affected HAPs. Therefore, CAM does not apply to the PSEU “Latex-HAPs”. However, 40 C.F.R. 63, Subpart JJJ does not specifically limit the VOC or 1,3-Butadiene emissions, so CAM applies for these two PSEUs.

Condition 7.1.1.2 of the permit requires operation of the flare (Control Device ID# 30B-01002) with a flame present at all times whenever emissions may be vented to the flame. In order to demonstrate compliance with this requirement, the permit condition 7.2.5.1 requires monitoring of the presence or absence of a flare pilot flame using a thermocouple or other equivalent device. Therefore, continuous monitoring of the detector signal that indicates the presence of the pilot flame will provide reasonable assurance of ongoing compliance with the VOC limit. Conditions 7.2.6 to 7.2.13, 7.4.4 & 7.5.2 have been added to the permit.

Monitoring per the CAM Plan will be as follows:

		PSEUs LX1 (VOC and BD)
		Indicator No. 1
I.	Indicator	Flare (30B-01002) operation
	Monitoring Approach	The presence of a pilot flame at the flare is continuously monitored using a thermocouple.
II	Indicator Range	The indicator range is not numerical. The thermocouple activates an alarm if it detects less than 500 degrees F, indicating that the flame is absent. The alarm is deactivated when the thermocouple detects 500 degrees F, indicating the presence of a flame.
	A. QIP threshold	The permittee has chosen not to propose a threshold at this time since it is not required for this permitting action by 40 C.F.R. §64.8(a). Although the threshold is not required, the language for a QIP as it relates to other applicable requirements is set forth as permit condition 7.2.11.
III	Performance Criteria	
	A. Data Representativeness	The thermocouple is mounted at the flare pilot to continuously monitor the flame.
	B. Verification of Operational Status	All manufacturer's recommendations regarding periodic testing/checks for the proper installation and operations of the flame detecting device will be followed.
	C. QA/QC Practices and Criteria	The thermocouple, alarm switch and alarm are on an annual preventive maintenance schedule. During maintenance, all three are tested and the set point of the switch is verified.
	D. Monitoring frequency	Continuous
	E. Data Collection Procedure	Monitoring data (pilot flame presence/absence) is collected and stored electronically.
	F. Averaging Period	There is no averaging period since the flare pilot flame is either present or absent.

- h. The permittee submitted a CAM plan in this renewal application for WS-DC1(015-26012) and WV-DC1 (015-26013) to assure compliance with the Permit R13-0992B PM mass emission limitations through emission points WS-E3 and WV-E3. WS and WV extruder processes are CAM pollutant-specific emission units (PSEUs) for PM. The PM emissions from WS and WV extruder processes are controlled by baghouses. Conditions 9.2.2 to 9.2.5, 9.4.3, 9.4.4 & 9.5.1 have been either revised or added to the permit.

Monitoring per the CAM Plans for each of the PSEUs will be as follows:

		PSEUs WS & WV Lines (PM)
		Indicator No. 1
I.	Indicator	Visible Emissions.
	Monitoring Approach	Visible emissions from the dust collector exhaust will be monitored monthly using EPA Method 22-like procedures.
II	Indicator Range	No visible emissions. An excursion is defined as any visible emissions during the daily observations.
	A. QIP threshold	If five (5) observations indicate excursions during a 6-month reporting period, the permittee will develop and implement a QIP.

		PSEUs WS & WV Lines (PM)
		Indicator No. 1
III	Performance Criteria	
	A. Data Representativeness	Measurements are made at the emission point and are indicative of good operation and maintenance of the baghouse.
	B. Verification of Operational Status	There are no <i>new or modified monitoring equipment</i> ; therefore, verification of operational status pursuant to §64.3(b)(2) is not applicable.
	C. QA/QC Practices and Criteria	The observer will be educated on the general procedures (Method 22-like) for determining the presence of visible emissions.
	D. Monitoring frequency	The monitoring frequency is one time per day during daylight and normal operations.
	E. Data Collection Procedure	The data is collected per Method 22 procedures.
	F. Averaging Period	Not Applicable

14. *In the fact sheet for part 1 and parts 2-5, the SIC codes for the facility are listed as 2821, 2822, and 2899. What are these and why? SABIC's application only lists 2821.*

- a. 2821 – *Plastics Materials and Synthetic Resins*
- b. 2822 – *Synthetic Rubber*
- c. 2899 – *Chemicals and Chemical Preparations, NEC*

SABIC's answer: SABIC reviewed these SIC code numbers. This was likely an interpretation error in an early Title V application. At that time, GE Plastics operated facilities covered by these three SIC codes. Currently SABIC Innovative Plastics operates only facilities identified as SIC 2821. The SABIC Washington site has always been identified as SIC code 2821. The correct NAICS code is 325211.

15. Since the existing permit has been issued, 4 constructions permits have been revised. R13-2678, R13-1886E, R13-0658A and R13-1588B have been revised to R13-2678A, R13-1886F, R13-0658B and R13-1588D. R13-2678A, R13-1886F, R13-0658B were issued on July 28, 2011 and R13-1588D was issued on April 4, 2012. The revised construction permits are incorporated in this Title V permit.

16. Attachments A, B, D, E & F of existing Part 1 permit are eliminated because 40 C.F.R. 63 Subpart JJJ, EEEE & ZZZZ are subject to change. Attachment C of existing Part 1 is now Appendix 2.

17. Section 5.1.11 has been changed to reflect new 40 C.F.R. 63 Subpart DDDDD placeholder language.

18. Section 7.2.1 and 8.2.1 notes have been changed to better define deviation from established operating limits.

19. Section 4.4.1 is revised to be in conformity with boilerplate language of section 3.2.2.

20. Sections 4.1.14, 4.4.4 & 4.5.5 are changed (i) to include the requirements from amended 40 C.F.R. 63 Subpart EEEE and (ii) to clarify that 40 C.F.R. 63 Subpart EEEE applies to loading racks and unloading racks to the extent that they are not covered in other MACT standards (e.g. styrene loading and unloading is not covered by 40 C.F.R. 63 Subpart JJJ). Please note that the requirements for recordkeeping and reporting in sections 4.4.4 and 4.5.5 are limited to loading activities.

21. Section 5.4.5 is revised to include recordkeeping for 5.2.4.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

There are no Greenhouse Gas Clean Air Act requirements for this facility because the facility has not made any changes that triggered a PSD permit modification.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date:	April 20, 2012
Ending Date:	May 21, 2012

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.